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K&L Gates LLP				
P.O. Box 1135				
CHICAGO, IL 60690				
EXAMINER				
THAKUR, VIREN A				
ART UNIT		PAPER NUMBER		
1794				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

chicago.patents@klgates.com

Office Action Summary

Application No.

10/528,385

Applicant(s)

LEVY ET AL.

Examiner

VIREN THAKUR

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. As a result of the amendment to the claims, the rejection under 35 U.S.C. 112, second paragraph of claim 1 for the preamble being inconsistent with the body of the claim; claim 2 and 12 for the limitation "a freezer which is supplied with expansion gas so as to partially freeze and expand the ice cream"; claim 7 for the limitation "sufficiently quickly"; claim 8 for the limitation "the piston then being positioned just under the dispensing member"; claim 9 for the limitation "into which the product to be packaged which contains the amount of expansion gas needed to obtain the desired expanded state or the dispensed product is introduced;" claim 13 for the limitation "at the output"; claim 15 for the limitation "wherein the temperature of the product is lowered from -15°C to -20°C" have all been withdrawn.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 1 and 16 recite the limitation "passing the container having the frozen dessert through a freezing tunnel at a temperature that allows the frozen dessert to form a pasty state." It is noted that applicants' specification indicates that the temperature of this tunnel is between -35°C to -38°C. Since the product is already frozen ("the frozen product") the claim is not clear as to how placing a frozen product in a freezing tunnel having a temperature of at least -35°C would result in the formation of a pasty state, especially since the product is already frozen when placing it into the container.

Claim 2 recites the limitation "good dissolution of the expansion gas." The limitation is subjective as to what can be considered "good dissolution."

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-4, 9, 12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riviere et al. (WO 9730600) in view of Smadar et al. (US 3677443), Getz (US 2294172) and Morley et al. (US 4346120), for the reasons given in the previous Office Action, mailed December 11, 2008 and in further view of Hall (US 5698247), Destephano et al. (US 6379736) and Cox et al. (US 5633029).

Claims 1 and 16 newly recite the limitation "passing the container having the frozen dessert through a freezing tunnel at a temperature that allows the frozen dessert to form a pasty state." It is noted that Riviere et al. already teach the concept of freezing the dessert while in the container to a temperature of between -18°C and -24°C. It is further noted that Morely et al. already teaches the step of freezing the ice cream mix to create a partially frozen product, while subsequently injecting an expansion gas, such as nitrous oxide. After this step, Morely et al. teaches packaging the product and reducing the temperature to below 0°F (~17°C) (column 7, lines 50-59 and lines 61-62). Morely et al. is similar to Riviere et al. in reciting making a "pre-mix" which is subsequently homogenized and then cooled, and then subsequently frozen. Morely et al. also teaches that the resultant product is a "soft serve" type ice cream and therefore one which would be spoonable. This is similar to Riviere et al., who also teach a spoonable ice cream composition. To therefore place the frozen ice cream product into the package and subsequently freeze the combination would therefore have been obvious to one having ordinary skill in the art, for the purpose of providing the desired consistency to the final ice cream product that has already been dispensed

in the container. It is noted that Riviere et al. also teach "deep-freezing" after placing the product into the container.

It is noted that Riviere et al. does not necessarily disclose a frozen product in a container which is subsequently placed into a freezing tunnel, however, Morely et al. teaches that if one desired to include an expansion gas into the soft-serve type ice cream, then it would have been obvious to have frozen and aerated the ice cream mix, the obvious result being entrainment of the expansion gas within the frozen ice cream, such that upon dispensing the product is aerated to the desired amount. Whether one actually employed a "freezing tunnel" or simply a freezer that can freeze the spoonable ice cream at a temperature of -17°C, as taught by Morely et al., for instance, would have been an obvious matter of choice and/or design.

In any case, however, Hall teaches placing a frozen ice confection into a package and subsequently freezing this product within a freezing tunnel at -35°C, for instance, with the product still being spoonable (column 3, lines 3-8). Destephano et al. have been further relied on to teach employing freezing tunnels to harden a frozen confection at temperatures up to -35°F (~-37.2°C), which still results in the product being a soft gelato after hardening (column 7, lines 47-65), and Cox et al. has been relied on as further evidence that it was conventional to employ freezing tunnels and varying the particular conditions in the freezing tunnels for the purpose of achieving the desired structure and shape to the final product (column 4, lines 25-40). The references to Hall, Destephano et al. and Cox et al. thus teach that it was conventional in the art to package a frozen confection and then pass through a freezing tunnel to

achieve the particular state of the frozen confection, such as a soft, spoonable / malleable texture. Since Riviere et al. already teaches storing the spoonable confection in a pressurized container at between -18 and -24°C to therefore employ another type of conventional freezer for freezing a package comprising a frozen confection, such as a tunnel freezer would therefore have been an obvious matter of choice and/or design.

7. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1-4, 9, 12 and 14-16, above, and in further view of Scheindel (EP 0136104) and Lowy et al (US 3710538), for the reasons given in the previous Office Action, mailed December 11, 2008.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1-4, 9, 12 and 14-16, above, and in further view of DeVries (US 4967931) as further evidenced by Stogo ("Ice Cream and Frozen Desserts"), for the reasons given in the previous Office Action, mailed December 11, 2008.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1-4,9,12 and 14-16, above and in further view of Youel (US 5277336) and in further view of Scheindel (US 6880732), Obrist (US

5799469), Mekata (EP1013566), Heimgartner (US 3225967) and Riviere (FR2829748).

Claim 8 newly recites that the piston is positioned adjacent and under the dispensing member prior to the dispensing member filling the container. Claim 8 differs from the previous combination in the new recitation of the piston being positioned adjacent and under the dispensing member prior to the dispensing member filling the container.

Youel teaches the concept of filling both the product and the propellant through the dispensing member has been a conventional expedient for filling a pressurized container with a product (column 3, line 46 to column 4, line 21 and figures 4a-4d)).

Obrist has been relied on as further evidence that it was a conventional expedient in the art to have a barrier that separates the product from the propellant, which is initially adjacent and under the dispensing member, and when subsequently filled with product, is lowered (figures 6 and 7 and column 5, lines 10-37). The advantage of this arrangement is that the air present within the upper section of the can, can be expelled.

Mekata further evidences this concept in figure 17, steps S1-S3. In these figures Mekata even teaches first injecting a propellant through the dispensing device (figure 17, step S2) with the gas then removed from the upper portion of the container S2A and subsequently a product charged into the upper compartment, thus driving down the piston (S3). Mekata also teaches that this process forgoes the need to turn the

container over to add the propellant gas into the container (column 15, paragraph 0070).

Additionally, Scheindel '732 teaches filling a product into a container which is pressurized, wherein, during loading of the product, the piston is forced down against the bottom of the container (column 4, lines 34-39). Obviously, if the piston is being forced down, it would thus have been within the upper portion of the container. Scheindel '732 even teaches loading ice cream saturated with an expansion agent, such as nitrous oxide into the container while ensuring that the nitrous oxide stays in solution during dispensing (column 4, lines 15-27) and thus the particular piston is important for the purpose of maintaining the nitrous oxide in solution and preventing migration of the product and propellant during the loading and charging steps (column 6, lines 8-15)

Heimgartner also teaches the concept of a barrier adjacent and under the dispensing member, except with a bag instead of a piston (figures 1 and 2). In this case, Heimgartner teaches that a paste like product is filled through the dispensing valve and a propellant gas filled from the bottom of the container (column 2, lines 41-50). The only difference between Heimgartner and the claim is the use of a contractable bag being adjacent and under the dispensing member instead of a piston. Riviere '748 also teaches employing both bags and movable pistons for placing a product with an expansion gas and a propellant (see figure 3a to 3h). Therefore, the art taken as a whole teaches filling a pressurized container with a pasty product including a pasty ice cream, and further teaches that the barrier between the product and the

propellant can be initially adjacent and under the dispensing device. To therefore employ a conventional arrangement of the barrier between the propellant and the product wherein the barrier is positioned adjacent to and under the dispensing member would have been obvious to one having ordinary skill in the art for the purpose of minimizing the amount of air within the product containing compartment, as taught by Obrist and Mekata and for maintaining a gas incorporated into a product in solution, as taught by Scheindel '732. Mekata's filling process even forgoes the need for turning the container upside down to fill with a propellant. These references all teach that the particular arrangement of the pressurized container has been a conventional arrangement when filling with a product and a propellant and to therefore employ a conventional container would also have been an obvious matter of choice and/or design to one having ordinary skill in the art, especially since the art teaches employing these containers for dispensing pasty as well as foaming products (which include ice cream).

10. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1-4, 9, 12 and 14-16, above and in further view of FR2233843, Ciabatti (EP 0509967), Scheindel (EP 0136104) and Clauwert (EP1061006), for the reasons given in the previous Office Action, mailed December 11, 2008.

11. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1-4, 9, 12 and 14-16, above and in further view of

GB1232929 and Fiedler (US 4659575), for the reasons given in the previous Office Action, mailed December 11, 2008.

Response to Arguments

12. Regarding the limitation to claim 2 of "good dissolution of the expansion gas" being indefinite, applicants' urge that the skilled artisan would immediately appreciate that the expansion gas must simply be sufficiently dissolved within the product so as to provide sufficient expansion of the product. Therefore, applicants assert that it would be appreciated that partial dissolution or unequal dissolution may not provide sufficient or good dissolution to provide a consistently expanded product.

This argument has been considered but is not persuasive. It is noted that although applicants urge that partial or unequal dissolution may not provide sufficient or good dissolution to provide "a consistently expanded product," it is noted that the claim does not provide any recitation of the particular result that is linked with "good dissolution" (i.e. wherein the dissolution is sufficient to provide a consistently expanded product). Furthermore, applicants have not provided any evidence supporting the urging of what may or may not provide sufficient or good dissolution. Therefore the rejection has been maintained.

13. On page 10 of the response, applicants urge that the advantages of their invention can be achieved "by providing two different gases for dispensing the product, one of which has the propulsion function and the other the expansion function." The art taken as a whole already teaches this concept. The concept of the expansion of the dispensed product being dependent on the amount and solubility of the expansion gas introduced into the receptacle is not a novel concept. As taught by Riviere et al., Smadar, Getz and Morely et al., it has been conventional in the art to dissolve an expansion gas, such as nitrous oxide into a product, such that upon dispensing the product achieves a desired texture, while also incorporating another gas which acts solely as a propellant. Applicants have not provided any specificity to the particular properties or steps of the process that would not have been obvious, in view of the art taken as a whole.

14. On page 11 of the response, applicants assert that the combination of Riviere, Smadar, Getz and Morely do not disclose passing a container having the frozen dessert through a freezing tunnel at a temperature that allows the frozen dessert to form a pasty state.

It is noted however, that Riviere already teaches a frozen dessert that is of a pasty state and even teaches freezing the dessert using a freezer into which the combination of the container and the dessert have been placed. Nevertheless, it is noted that the references that have been newly relied on further teach the use of a freezing tunnel that also uses temperatures within applicants' temperature range for the

freezing tunnel which also can result in the product maintaining its malleable, pasty state. Cox et al. even teaches that the particular conditions employed can be routinely determined by experimentation depending on the particular product desired, as discussed above. Applicants further urge that Riviere is entirely directed toward a frozen dessert that is spoonable at freezing temperatures without the necessity of the product being expanded by the incorporation of a gas or passing through a nozzle under pressure into a container in which the product is packaged under pressure. It is noted however, that Riviere et al. clearly teach on column 6 that the product can include an expansion gas, such as nitrous oxide as well as a propellant such as nitrogen. It is noted that an oral translation of page 10, lines 30-37 of the Riviere publication (WO 9730600) indicates that the gas is truly an expansion gas, nitrous oxide. A request has been placed with the translation department at the USPTO for a complete translation of the Riviere '600 publication, which will be placed in the file and sent to applicant upon receipt of the translated document.

15. On page 11 of the response, applicants assert that none of Smadar, Getz and Morely disclose passing a container having a frozen dessert through a freezing tunnel that allows the dessert to form a pasty state prior to dispensing. It is noted however, that both Smadar and Morely teach dispensing a pasty product and both even teach employing an expansion gas into the ice cream, which when dispensed results in a degree of aeration to the product. Obviously, the product would have been in a softened state within the container since it is also dispensed in a soft state. Getz has

only been relied on to teach the dissolution of nitrous oxide into a cream composition increases the expansion of the product upon dispensing. As claimed, the art already teaches the concept of providing a separated, pressurized container wherein a frozen dessert with an expansion gas such as nitrous oxide is dissolved therein is placed into an upper compartment of a pressurized container and a propellant placed within a lower compartment. The art even teaches charging such products through a valve while also desiring to maintain the expansion gas in solution until dispensing. Therefore applicants' claimed invention is considered obvious in view of the applied references, above. As an aside, although Scheindel '732 is not required or relied on for the rejection of claims 1 and 16, it is noted that even Scheindel '732 teaches maintaining the expansion gas in solution within the ice cream, as discussed above.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIREN THAKUR whose telephone number is (571)272-6694. The examiner can normally be reached on Monday through Friday from 8:00 am - 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steve Weinstein/
Primary Examiner, Art Unit 1794

/N. T./
Examiner, Art Unit 1794